



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,362	06/21/2001	Bruce Donald Innes	13DV13934	4455
31450	7590	11/16/2005	EXAMINER	
MCNEES WALLACE & NURICK LLC 100 PINE STREET P.O. BOX 1166 HARRISBURG, PA 17108-1166			STERRETT, JONATHAN G	
			ART UNIT	PAPER NUMBER
			3623	

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/886,362	INNES ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Jonathan G. Sterrett	3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 31 August 2005.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

1. This **Final Office Action** is responsive to applicant's amendment filed August 31, 2005. The applicant amended **Claims 1 and 9**. Currently **Claims 1-20** are pending.

### *Response to Arguments*

2. The applicant's arguments have been fully considered, but they are not persuasive.

Regarding the applicant's argument that the references are different documents for the purposes of prior art references, the examiner respectfully disagrees.

The examiner refers the applicant to the MPEP 2131.01 which allows for the use of multiple reference 102 rejections stating:

**"Extra Reference or Evidence Can Be Used To Show an Inherent Characteristic of the Thing Taught by the Primary Reference.**

To serve as an anticipation when the reference is silent about the asserted inherent characteristic, such gap in the reference may be filled with recourse to extrinsic evidence. Such evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." Continental Can Co. USA v. Monsanto Co., 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991)."

References U1, V1, W1 and X1 describe features of the RiskTrak Software Product. The rejection is maintained because one of ordinary skill in the art would be able to recognize that the references U1, V1, W1 and X1 address functionality inherent in the RiskTrak Software Product.

Regarding the applicant's argument that RiskTrak does not disclose "**identifying a plurality of risks associated with the project**", the examiner respectfully disagrees. Reference U1 page 1 paragraph 1 line 1-4 discloses that risks are identified. Reference X1's teaching that structuring risks in a similar fashion to a WBS (work breakdown structure) discloses that risks are not only identified, but categorized according to structure provided to a project by a WBS.

Regarding the applicant's argument that "**importing and exchanging the data is functionally different than storing the data**", the examiner respectfully disagrees. The examiner refers the applicant to Breitfelder, Kim; Messina, Don; "The Authoritative Dictionary of IEEE Standards Terms", 7<sup>th</sup> Edition, Copyright 2000, IEEE Press, p. 270, where data exchange is defined as 'the use of data by more than one program or system' and 'the movement of data between two or more programs or systems'. Since RiskTrak discloses the exchange of data with an ODBC database, one of ordinary skill in the art would recognize that exchanging data includes storing data to this database. Since RiskTrak addresses risk management, this includes storing risk information.

Regarding the applicant's argument that the limitation "**assessing at least one risk of the plurality of risks using the defined impact criteria**" is not disclosed by RiskTrak, the examiner respectfully disagrees. Reference X1 page 2 paragraph 3 line 1-4 discloses that risks can be assessed according to probability (i.e. risk impact criteria).

Regarding the applicant's argument that the limitation "**preparing at least one abatement corresponding to at least one risk of the plurality of risks**" is not disclosed by RiskTrak, the examiner respectfully disagrees. Reference W1 page 2 paragraph 6 line 1-2 discloses that RiskTrak has the ability to generate plans for mitigation (i.e. abatement) for many risks.

Regarding the applicant's argument that the limitation "**storing, in the database, abatement information on the at least one abatement**" is not disclosed by RiskTrak, the examiner respectfully disagrees. Reference W1 page 2 paragraph 6 line 1-2 discloses that RiskTrak has the ability to generate plans for mitigation (i.e. abatement). Since RiskTrak, as noted above, exchanges data with an ODBC database, this includes storing the mitigation (i.e. abatement) plans (i.e. information) in the database. See also Reference W1 page 3 paragraph 4 line 1-5 – attaching files to project risks and mitigations (i.e. abatement) and exporting data to an ODBC database meet the claim limitation. The examiner also refers the applicant to Merriam-Websters Collegiate Dictionary, 10<sup>th</sup> edition, Copyright 1997, p.1 & 746. **Abate** (i.e. as in **abatement**)

is defined as “**abate** **stresses** the idea of progressive diminishing [the storm **abated**]”. **Mitigate** (i.e. as in **mitigation**) here is defined as “**to cause to become less harsh or hostile**”. One of ordinary skill in the art of risk management would recognize that abating a risk and mitigating a risk are the same.

Regarding the applicant’s argument that the limitation “**updating the risk information and the abatement information in the database as the project is completed**” is not disclosed by RiskTrak, the examiner respectfully disagrees.

The limitation is disclosed as per:

Reference X1 page 2 paragraph 5, complete visibility to all program or project risks are provided throughout the life of the project.

Reference V1 page 1 paragraph 2 line 1-2, **Risk and Mitigation (i.e. abatement) information can be updated to the database in real time, 24 hours a day, during the entire length of the project, including as the project is completed.**

Regarding the applicant’s argument that the limitation “**repeating the steps of monitoring the plurality of risks and updating the risk information and the abatement information in the database until each risk of the plurality of risks has a corresponding completed abatement and is indicated as finished**” is not disclosed by RiskTrak, the examiner respectfully disagrees. The limitation is disclosed per:

Reference V1 page 1 paragraph 2 line 1-2, Risk and Mitigation (i.e. abatement) information can be updated to the database continuously during the entire length of the project, from start to finish.

Reference W1 page 2 paragraph 6 line 1-2, risks can be continuously assessed and monitored throughout the life of a project – throughout the life of the project would include until each of the risks of the plurality of risks has a corresponding completed abatement and is indicated as finished. The completion of a milestone in a project or completion of the project itself includes indicating that not only are the specific project milestone is finished, but also that the risks associated with that project milestone (a schedule risk) would be indicated as finished.

In further response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "all risks are addressed") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding the applicant's argument that the limitation "**adding an additional abatement corresponding to at least one risk of the plurality of risks and removing a risk from the plurality of risks for the project**" is not disclosed by RiskTrak, the examiner respectfully disagrees.

These limitations are disclosed as per:

**adding an additional abatement corresponding to at least one risk of the plurality of risks;**

Reference X1 page 2 paragraph 7 line 1-5, project mitigations (i.e. abatements) corresponding to project risks can be added to a project baseline through a drag and drop interface.

**removing a risk from the plurality of risks for the project; and**

Reference X1 page 4 paragraph 5 line 1-3, changes to risks for the project are updated in real time. This includes removing a risk due to changes in risk where the risk is eliminated, either due to other external changes or the effects of a mitigation (i.e. abatement) plan.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the applicant states that the "significant savings and technical reliability...would be achieved by advances in acquisition excellence" comprises an inadequate motivation to combine Link with RiskTrak. The examiner would respectfully point out to the applicant that "advances in acquisition excellence" refers to the rollout of risk management at the NRO, of

which the claim limitations cited by Link comprise “advances in acquisition excellence”.

Regarding the applicant’s argument that Link does not teach “**selection of a point on the waterfall chart**”, the examiner respectfully disagrees. Link clearly meets the limitation in the cited reference “Links (i.e.hyperlinks) are provided to return users to related areas in the application”. Since these links are disclosed on the chart, they meet the limitation of “selection of a point on the waterfall chart”.

Regarding the applicant’s argument that Link does not teach **providing an estimated probability determination of the at least one abatement corresponding to at least one risk**, the examiner respectfully disagrees. The graph in Figure 3 clearly shows the impact of mitigation plans upon various risks (see legend on the right “Risk A” through “Risk H”) and the estimated probability determination. The various lines illustrate how the mitigation plans (i.e. abatement) move the various risks around the “barometric chart” from areas of high and low probability to areas of small and large impacts. Also see the text at the top of the page “gives senior management a snapshot of where risks have been and where they are going”.

Regarding the applicant’s challenge of Official Notice, the examiner would note that the applicant has attempted to challenge the taking of Official Notice on

page 21 line 1; however, applicant has not provided adequate information or argument so on its face it creates a reasonable doubt regarding the circumstances justifying the Official Notice. Therefor, the presentation of a reference to substantiate the Official Notice is not deemed necessary. The examiner's taking of Official Notice has been maintained.

Gilchrist provides the discussion of FMEA as a concept of providing a risk score for a project based on assessment of that risk.

Gilchrist, Warren, "Modelling failure modes and effects analysis", 1993, The International Journal of Quality and Reliability Management, Bradford, Vol. 10, Iss 5, p.16, ProQuest ID 1123094.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. **Claims 1, 2, 9, 10 and 17** are rejected under 35 U.S.C. 102(a) as being anticipated by **RiskTrak Software Product** as disclosed in the following documents:

"RiskTrak Project Risk Management Software", **March 6, 2000**, pp.1-2,  
[web.archive.org/web/20000306225414/http://risktrak.com/](http://web.archive.org/web/20000306225414/http://risktrak.com/), hereafter referred to  
as **Reference U1**.

"Features and Benefits of RiskTrak Risk Management Software",  
**November 4, 1999**, pp.1-2,  
[web.archive.org/web/19991104135754/http://risktrak.com/feature.htm](http://web.archive.org/web/19991104135754/http://risktrak.com/feature.htm), hereafter  
referred to as **Reference V1**.

"RiskTrak Risk Management Software for DoD Program Management and  
Program Management and Earned Value", **October 7, 2000**, pp.1-5,  
[web.archive.org/web/20001007025716/http://risktrak.com/dod.htm](http://web.archive.org/web/20001007025716/http://risktrak.com/dod.htm), hereafter  
referred to as **Reference W1**.

"RiskTrak is an Integrated Tool for the Management of Cost, Schedule &  
Technical Risk", **November 21, 2000**, pp.1-5,  
[web.archive.org/web/20001121221300/http://risktrak.com/evms.htm](http://web.archive.org/web/20001121221300/http://risktrak.com/evms.htm), hereafter  
referred to as **Reference X1**.

Regarding **Claim 1**, RiskTrak discloses:

**defining impact criteria for all risks of a project**,

Reference X1 page 2 paragraph 3 line 2-6, impact criteria for all and any  
project risk can be defined during project setup based on weight factors and  
probabilities

**identifying a plurality of risks associated with the project**;

Reference X1 page 2 paragraph 2 line 1-3, a plurality of risks can be identified and structured according to project planning methodology, e.g., WBS or other.

**storing, in a database, risk information on at least one risk of the plurality of risks,**

Reference V1 page 1 paragraph 4 line 1, all risk information can be stored in any ODBC-relational database.

**assessing at least one risk of the plurality of risks using the defined impact criteria;**

Reference W1 page 2 paragraph 6 line 1-2, RiskTrak provides for continuous risk assessment based on impact criteria defined above during project setup.

**preparing at least one abatement corresponding to at least one risk of the plurality of risks;**

Reference W1 page 2 paragraph 5 line 6, mitigation (i.e. abatement), is prepared for each program risk.

**storing, in the database, abatement information on the at least one abatement,**

Reference W1 page 2 paragraph 8 line 1-2, all project risk information, including abatement information is stored in the RiskTrak database.

**monitoring the plurality of risks associated with the project as the project is completed;**

Reference W1 page 2 paragraph 6 line 1-2, RiskTrak provides continuous monitoring of risks and the associated mitigation (i.e. abatement) plans during the life of the project.

Reference W1 page 2 paragraph 8 line 1-2, RiskTrak can be used throughout the life of a program for risk management.

**updating the risk information and the abatement information in the database as the project is completed; and**

Reference X1 page 2 paragraph 5, complete visibility to all program or project risks are provided throughout the life of the project.

Reference V1 page 1 paragraph 2 line 1-2, Risk and Mitigation (i.e. abatement) information can be updated to the database in real time, 24 hours a day, during the entire length of the project, including as the project is completed.

**repeating the steps of monitoring the plurality of risks and updating the risk information and the abatement information in the database until each risk of the plurality of risks has a corresponding completed abatement and is indicated as finished.**

Reference V1 page 1 paragraph 2 line 1-2, Risk and Mitigation (i.e. abatement) information can be updated to the database continuously during the entire length of the project, from start to finish.

Reference W1 page 2 paragraph 6 line 1-2, risks can be continuously assessed and monitored throughout the life of a project – throughout the life of the project would include assessing and monitoring each risk until each of the risks of the plurality of risks has a corresponding completed abatement and is

indicated as finished. The completion of a milestone in a project or completion of the project itself includes indicating that not only are the specific project milestones are finished, but also that the risks associated with that project milestone (a schedule risk) would be indicated as finished.

Regarding **Claim 2**, RiskTrak discloses:

**automatically generating a report having risk information and abatement information from the database.**

Reference X1 page 3 paragraph 6 line 1-3, risk management and contingency plans are automatically generated from RiskTrak's database.

Reference V1 page 1 paragraph 5 line 1-4, project status reports are available with a single mouse click. These reports include risk and abatement information.

**Claims 9 and 10** recite similar limitations as those recited in **Claims 1 and 2** and are therefore rejected under the same rationale.

Regarding **Claim 17**, Risktrak discloses:

**adding an additional risk to the plurality of risks for the project;**

Reference X1 Page 4 paragraph 4 line 3, new risks can be entered immediately upon receipt of new information.

Reference W1 Page 3 paragraph 4 line 1-2, an unlimited number of risks can be entered into the database.

**adding an additional abatement corresponding to at least one risk of the plurality of risks;**

Reference X1 page 2 paragraph 7 line 1-5, project mitigations (i.e. abatements) corresponding to project risks can be added to a project baseline through a drag and drop interface.

**removing a risk from the plurality of risks for the project; and**

Reference X1 page 4 paragraph 5 line 1-3, changes to risks for the project are updated in real time. This includes removing a risk due to changes in risk where the risk is eliminated, either due to other external changes or the effects of a mitigation (i.e. abatement) plan.

**removing an abatement corresponding to at least one risk of the plurality of risks.**

Reference X1 page 4 paragraph 5 line 1-3, changes to mitigation (i.e. abatement) for the project are updated in real time. This includes removing a mitigation due to it being effective in eliminating a risk.

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 3-8, 11-16 and 18-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over RiskTrak in view of Link.

Link, Jo Lee Loveland; Barbour, Rick; Krum, Al; Neitzel, August;  
Rollout and Installation of Risk Management at the IMINT Directorate, National  
Reconnaissance", December 1999, Technical Report CMU/SEI-99-TR-009,  
ESC-TR-99-009. pp.1-191.

<http://www.sei.cmu.edu/pub/documents/99.reports/pdf/99tr009.pdf>.

Regarding **Claim 3**, RiskTrak teaches all the limitations of Claim 2 above,  
and also teaches:

**providing additional risk information and abatement information  
from the database.**

Reference X1 page 3 paragraph 6 line 1-3, risk management and  
contingency plans (i.e. contingency plans are abatement information) are  
provided from RiskTrak's database

RiskTrak does not teach:

**wherein the report is a waterfall chart and the step of monitoring the  
plurality of risks further comprises a step of providing additional risk  
information and abatement information from the database in response to a  
selection of a point on the waterfall chart.**

Link teaches:

**wherein the report is a waterfall chart and the step of monitoring the  
plurality of risks further comprises a step of providing additional risk**

**information and abatement information in response to a selection of a point on the waterfall chart.**

Page 185, this is a waterfall chart used to monitor risk mitigation (i.e. abatement) monitoring

Page 184 line 7, links are provided to return users to related areas; these links would include the selection of a point on the waterfall chart. Related areas would provide additional risk and abatement information because the waterfall chart is a graph of project management plans to abate and mitigate risks in the future.

Link teaches the use of the waterfall chart promotes efficiency in project reviews and in developing a broad system understanding (Page 66 paragraph 5.2.3.4 line 1-4). This is an important consideration when applying risk management to complex projects where the plethora of reporting detail makes it difficult to understand the larger implications of what is occurring in the project.

RiskTrak and Link are analogous art because both deal with the application of tools and methodologies to provide risk management.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of RiskTrak, regarding providing risk management tools and methodologies, to include providing a waterfall chart and additional risk and abatement information in response to a selection of a point on

the waterfall chart, as taught by Link, because it would improve the efficiency in conducting a risk management review, as taught by Link.

Regarding **Claim 4**, RiskTrak teaches all the limitations of Claim 1 above, but does not teach

**wherein the step of defining impact criteria further comprises a step of defining impact criteria for at least one issue selected from the group consisting of technical issues, scheduling issues and cost issues.**

Link teaches:

**wherein the step of defining impact criteria further comprises a step of defining impact criteria for at least one issue selected from the group consisting of technical issues, scheduling issues and cost issues.**

Page 66 Table 4 defines impact criteria for a system level risk consisting of technical issues (e.g. control of vehicle), scheduling and cost issues. The impact criteria are defined in terms of low, medium and high probabilities.

Link teaches that their approach for risk management would result in significant savings and technical reliability for mission-critical systems (Page 12 paragraph 2.3 line 1-4).

RiskTrak and Link are analogous art because both deal with the application of tools and methodologies to provide risk management.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of RiskTrak, regarding providing risk management tools and methodologies, to include defining impact criteria for technical, cost and scheduling issues, as taught by Link, because it would provide significant cost savings during development and ensure technical reliability, as taught by Link.

Regarding **Claim 5**, RiskTrak teaches all the limitations of Claim 1 above and teaches:

Assigning of weight factors and probabilities in analyzing and managing risk (Reference X1 page 2 paragraph 3 line 1-6).

RiskTrak does not teach:

**providing a probability determination for at least one risk;**

**providing a technical impact determination for at least one risk;**

**providing a cost impact determination for at least one risk; and**

**providing a schedule impact determination for at least one risk.**

Link teaches:

**providing a probability determination for at least one risk;**

Page 66 Table 4, probability determinations are provided in row 2

“Probability of Occurrence” for the risk outlined in this table.

**providing a technical impact determination for at least one risk;**

Page 66 Table 4, a technical impact determination is provided across various probability categories, e.g. ranging from lack of vehicle control to total vehicle control.

**providing a cost impact determination for at least one risk; and**

Page 66 Table 4, a cost impact is provided, e.g. ranging from >\$5 million at a high risk probability to <\$1million for a low probability.

**providing a schedule impact determination for at least one risk.**

Page 66 Table 4, a schedule impact determination is provided that measures the schedule impacts at high, medium and low risk.

Link teaches that their approach for risk management would result in significant savings and technical reliability for mission-critical systems (Page 12 paragraph 2.3 line 1-4).

RiskTrak and Link are analogous art because both deal with the application of tools and methodologies to provide risk management.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of RiskTrak, regarding providing risk management tools and methodologies, to include providing a probability determination and a technical, cost and schedule impact determination, as taught

by Link, because it would provide significant cost savings during development and ensure technical reliability, as taught by Link.

Regarding **Claim 6**, RiskTrak teaches all the limitations of Claim 1 above but does not teach:

**providing an estimated probability determination of the at least one abatement corresponding to at least one risk;**

**providing an estimated technical impact determination of the at least one abatement corresponding to at least one risk;**

**providing an estimated cost impact determination of the at least one abatement corresponding to at least one risk; and**

**providing an estimated schedule impact determination of the at least one abatement corresponding to at least one risk.**

Link teaches that program and project risks can be attributed into technical, cost, schedule and probability factors (Page 66 Table 4).

Link also teaches:

**providing an estimated probability determination of the at least one abatement corresponding to at least one risk;**

Page 66 Table 4 shows that risks are categorized in terms of probabilities, as does Page 138 Figure 3, which shows how various risks are anticipated to move in the probability/impact continuum.

Page 67 paragraph 5.2.3.7. "Waterfall Chart" provides an estimated probability determination of a mitigation strategy (i.e. abatement) corresponding to at least one risk. The waterfall chart tracks and forecasts the impact an abatement will have on risk.

**providing an estimated technical impact determination of the at least one abatement corresponding to at least one risk;**

Page 67 paragraph 5.2.3.7. "Waterfall Chart" provides an estimated probability determination of a mitigation strategy (i.e. abatement) corresponding to at least one risk, including technical impacts. The waterfall chart tracks and forecasts the impact an abatement will have on risk, including technical risks.

**providing an estimated cost impact determination of the at least one abatement corresponding to at least one risk; and**

Page 67 paragraph 5.2.3.7. "Waterfall Chart" provides an estimated probability determination of a mitigation strategy (i.e. abatement) corresponding to at least one risk, including cost impacts. The waterfall chart tracks and forecasts the impact an abatement will have on risk, including cost risks.

**providing an estimated schedule impact determination of the at least one abatement corresponding to at least one risk.**

Page 67 paragraph 5.2.3.7. "Waterfall Chart" provides an estimated probability determination of a mitigation strategy (i.e. abatement) corresponding to at least one risk, including schedule impacts. The waterfall chart tracks and forecasts the impact an abatement will have on risk, including schedule risks.

Link teaches that their approach for risk management would result in significant savings and technical reliability for mission-critical systems (Page 12 paragraph 2.3 line 1-4).

RiskTrak and Link are analogous art because both deal with the application of tools and methodologies to provide risk management.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of RiskTrak, regarding providing risk management tools and methodologies, to include providing abatement effects upon probability, technical, cost and schedule risks, as taught by Link, because it would provide significant cost savings during development and ensure technical reliability, as taught by Link.

Regarding **Claim 7**, RiskTrak teaches all the limitations of Claim 1 above but does not teach:

**providing an actual probability determination of the at least one abatement corresponding to at least one risk based on actual performance of the at least one abatement;**

**providing an actual technical impact determination of the at least one abatement corresponding to at least one risk based on actual performance of the at least one abatement;**

**providing an actual cost impact determination of the at least one**

**abatement corresponding to at least one risk based on actual performance**

**of the at least one abatement; and**

**providing an actual schedule issue impact determination of the at least**

**one abatement corresponding to at least one risk based on actual performance of the at least one abatement.**

Link teaches:

**providing an actual probability determination of the at least one abatement corresponding to at least one risk based on actual performance of the at least one abatement;**

Page 67 paragraph 5.2.3.7, waterfall charts provide a probability determination of an abatement corresponding to at least one risk based on the performance of the abatement. The waterfall charts track progress of a mitigation plan to see how they are effective or not in reducing a particular risk item.

Page 185 illustrates a waterfall chart and how the mitigation (i.e.. abatement) program reduced the project risk

**providing an actual technical impact determination of the at least one abatement corresponding to at least one risk based on actual performance of the at least one abatement;**

Page 67 paragraph 5.2.3.7, the waterfall chart is used to describe progress in reducing risk exposure (both in terms of impact and probability) from

a mitigation (i.e. abatement) standpoint. Link teaches that program risks have three components, one of which is technical risk – see page 66 Table 4.

**providing an actual cost impact determination of the at least one abatement corresponding to at least one risk based on actual performance of the at least one abatement; and**

Page 67 paragraph 5.2.3.7, the waterfall chart is used to describe progress in reducing risk exposure (both in terms of impact and probability) from a mitigation (i.e. abatement) standpoint. Link teaches that program risks have three components, one of which is cost risk– see page 66 Table 4..

**providing an actual schedule issue impact determination of the at least one abatement corresponding to at least one risk based on actual performance of the at least one abatement.**

Page 67 paragraph 5.2.3.7, the waterfall chart is used to describe progress in reducing risk exposure (both in terms of impact and probability) from a mitigation (i.e. abatement) standpoint. Link teaches that program risks have three components, one of which is schedule risk– see page 66 Table 4.

Link teaches that their approach for risk management would result in significant savings and technical reliability for mission-critical systems (Page 12 paragraph 2.3 line 1-4).

RiskTrak and Link are analogous art because both deal with the application of tools and methodologies to provide risk management.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of RiskTrak, regarding providing risk management tools and methodologies, to include providing abatement effects upon probability, technical, cost and schedule risks, based upon abatement performance, as taught by Link, because it would provide significant cost savings during development and ensure technical reliability, as taught by Link.

Regarding **Claim 8**, RiskTrak teaches all the limitations of Claim 1 above and teaches:

Reference V1 page 1 paragraph 8, users utilize a database to store risk information.

Reference W1 page 2 paragraph 5 line 3, uses an SQL engine to query application, thus RiskTrak utilizes a database since SQL is a database query language.

RiskTrak does not teach  
**displaying risk information from the database in a table; and**  
**displaying abatement information from the database in a table.**

Link teaches:

**displaying risk information from the database in a table; and  
displaying abatement information from the database in a table.**

Page 66 Table 4, displays risk information into a table so that users can see the various categories, probabilities and impacts of project risks.

Page 187, the Risk Stoplight Chart displays abatement information in a table form.

Link teaches that their approach for risk management would result in significant savings and technical reliability for mission-critical systems (Page 12 paragraph 2.3 line 1-4).

RiskTrak and Link are analogous art because both deal with the application of tools and methodologies to provide risk management.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of RiskTrak, regarding providing risk management tools and methodologies and storing risk information in a database, to include providing risk and abatement information in a table, as taught by Link, because it would provide significant cost savings during development and ensure technical reliability, as taught by Link.

**Claims 11-16** recite similar limitations as those recited in **Claims 3-8** and are therefore rejected under the same rationale.

Regarding **Claim 18**, RiskTrak teaches all the limitations in Claims 1 and 2 above except for:

**a server computer, said server computer comprising a storage device**

**and a processor,**

Reference V1 page 1 paragraph 1, RiskTrak runs on any type of network and software/hardware combination. This would include running on a network server where the server comprises a storage device and processor.

**a risk management application to analyze and manage risks associated with a project,**

Reference V1 page 1 paragraph 1 line 2-3, Risktrak provides an organization the capability to analyze and manage risks through communication and reporting.

**said risk management application being stored in said storage device of said server computer, said risk management application further comprising:**

Reference V1 page 1 paragraph 1, Since RiskTrak runs on any hardware/software combination, this would include being stored in a storage device of a server computer running the software on a network.

**a database, said database storing information relating to said project,**

Reference X1 page 1 paragraph 4 line 1-6, RiskTrak stores information related to said project (in this case Earned Value information) in a relational database.

RiskTrak does not teach:

**means for calculating a risk score for said assessed at least one risk, said risk score being based on said assessment;**

Official Notice is taken that the concept of providing a risk score for a project based on an assessment of that risk is old and well known in the art. An example of this type of methodology is the FMEA technique pioneered in the Apollo Program in the late 1960's. FMEA (Failure Mode Effect Analysis) is a scoring method based on the assessment of a risk's severity (how bad would a failure be?), frequency (how likely is the failure to happen), and detectability (how easily would we know a failure occurred?).

Each risk is assessed a score in these three categories based on a team's assessment for that particular risk. The three scores are multiplied together to come up with a Risk Priority Number (RPN). The RPN gives the team a quantitative measure of the risk to help prioritize it in comparison to other risks. So scoring the risk in such a manner as FMEA gives a project team a baseline in which to compare risks and decide which risk deserves greater attention. Risks are prioritized in order from greatest Risk Priority Number to the least. FMEA

proved to be an effective way to focus on risks that provided the greatest threat to the Apollo mission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of RiskTrak, regarding providing a network based risk management software program, to include where that program provides a means for scoring risks based on assessment of those risks, as is known in the art, because it would provide a way for a project team to prioritize risks in order to eliminate the most potentially damaging risks to the project.

Regarding **Claim 19**, RiskTrak teaches all the limitations of Claim 18 above and also teaches:

**means for creating a new project, said means for creating a new project comprising means for providing project information, said project information being stored in said database,**

Reference X1 page 2 paragraph 3 line 3-6, the project setup feature allows a new project to be created and project information to be entered.

Reference X1 page 1 paragraph 4 line 1-6, RiskTrak stores information related to projects in a relational database.

**means for selecting a project from a plurality of projects;**

Reference X1 page 3 paragraph 5 line 1-3. a project can be selected from a group of multiple projects for the purpose of providing reports.

Reference X1 page 4 paragraph 2 line 2, a project can be selected for the purpose of comparing it to other projects.

**means for updating said project information stored in said database;**

Reference X1 page 4 paragraph 4 line 3, new risk information can be updated into project information.

Reference X1 page 1 paragraph 4 line 4, RiskTrak uses a relational database to store project and risk information.

RiskTrak teaches using a database to store risk and project information and using SQL to query the database to obtain risk and project information (Reference V1 page 1 paragraph 5 line 1-3).

RiskTrak does not teach:

**means for displaying a risk summary table, said risk summary table including risk information from said database; and**

**means for displaying an abatement summary table, said abatement summary table including abatement information from said database.**

Link teaches:

**means for displaying a risk summary table, said risk summary table including risk information from said database; and**

Page 189, the risk summary sheet displays a risk summary table that contains risk information.

**means for displaying an abatement summary table, said abatement summary table including abatement information from said database**

Page 187, the risk stoplight chart contains abatement summary information in a table format.

Link teaches that their approach for risk management would result in significant savings and technical reliability for mission-critical systems (Page 12 paragraph 2.3 line 1-4).

RiskTrak and Link are analogous art because both deal with the application of tools and methodologies to provide risk management.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of RiskTrak, regarding providing risk management tools and methodologies and storing risk information in a database, to include providing a risk summary table and abatement summary table, as taught by Link, because it would provide significant cost savings during development and ensure technical reliability, as taught by Link.

Regarding **Claim 20**, RiskTrak teaches all the limitations of Claim 18 above and also teaches:

**at least one client computer is in communication with said server**

**computer over an intranet;**

Reference V1 page 1 paragraph 1, RiskTrak runs on any type of network and software/hardware combination. This would include where at least one client computer is in communication with a server computer over an Intranet.

**said means for updating further comprises: means for adding risk information to said database on an additional risk to said plurality of risks;**

Reference X1 Page 4 paragraph 4 line 3, new risks can be entered immediately upon receipt of new information.

Reference W1 Page 3 paragraph 4 line 1-2, an unlimited number of risks can be entered into the database

**means for adding abatement information to said database on an additional abatement corresponding to at least one risk of said plurality of risks;**

Reference X1 page 2 paragraph 7 line 1-5, project mitigations (i.e. abatements) corresponding to project risks can be added to a project baseline through a drag and drop interface

**means for editing risk information in said database on a risk of said plurality of risks,**

Reference V1 page 1 paragraph 2 line 1-3, risk information can be updated, which would include editing the risk information in RiskTrak's database.

**means for editing abatement information in said database on an abatement corresponding to at least one risk of said plurality of risks;**

Reference X1 page 4 paragraph 8 line 1-2, changes, including abatement information can be made throughout the life of a project.

**means for removing risk information from said database on a risk of said plurality of risks; and**

Reference X1 page 4 paragraph 5 line 1-3, changes to risks for the project are updated in real time. This includes removing a risk information due to changes in risk where the risk is eliminated, either due to other external changes or the effects of a mitigation (i.e. abatement) plan

**means for removing abatement information from said database on an abatement corresponding to at least one risk of said plurality of risks.**

Reference X1 page 4 paragraph 5 line 1-3, changes to mitigation (i.e. abatement) for the project are updated in real time. This includes removing mitigation information as the mitigation over the course of a project.

RiskTrak also teaches a Microsoft Windows™ based application (Reference V1 page 2 paragraph 4 line 1-3) that uses a database.

RiskTrak does not teach:

**said risk management application is configured for execution in a web browser.**

Official Notice is taken that it is old and well known in the art of web-based applications to provide a web browser for interaction with a database. The use of a thin client (i.e. browser) to provide functionality over an intranet or internet allows for the flexibility provided by distributed computing.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of RiskTrak, regarding providing risk management tools and methodologies and storing risk information in a database, to include providing a web browser to access a risk management application on a server, because it would provide the flexibility of distributed computing to allow a wide variety of users to easily access the risk management application over network.

RiskTrak does not teach:

**said risk impact criteria comprises at least one criteria selected from the group consisting of technical impact criteria, schedule impact criteria and cost impact criteria;**

**said means for providing an assessment comprises means for providing an impact assessment for said risk impact criteria, said impact assessment including a high impact assessment, a medium impact assessment and a low impact assessment, and**

Link teaches:

**said risk impact criteria comprises at least one criteria selected from the group consisting of technical impact criteria, schedule impact criteria and cost impact criteria;**

Page 66 Table 4 defines risk impact criteria for a system level risk consisting of technical issues (e.g. control of vehicle), scheduling and cost issues. The impact criteria are defined in terms of low, medium and high probabilities.

**said means for providing an assessment comprises means for providing an impact assessment for said risk impact criteria, said impact assessment including a high impact assessment, a medium impact assessment and a low impact assessment,**

Page 66 Table 4 defines impact criteria for a system level risk consisting of technical issues (e.g. control of vehicle), scheduling and cost issues. The impact criteria are defined in terms of low, medium and high assessments.

Link teaches that their approach for risk management would result in significant savings and technical reliability for mission-critical systems (Page 12 paragraph 2.3 line 1-4).

RiskTrak and Link are analogous art because both deal with the application of tools and methodologies to provide risk management.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of RiskTrak, regarding providing risk management tools and methodologies, to include defining risk impact criteria and providing assessments for the risk impact criteria, as taught by Link, because it would provide significant cost savings during development and ensure technical reliability, as taught by Link.

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan G. Sterrett whose telephone number is 703-305-0550. The examiner can normally be reached on 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 703-305-9643. The fax

phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JGS

JGS 11-7-2005

*Susanna Diaz*  
*Susanna Diaz*  
*Primary Examiner*  
*A.U. 3623*